

BRIEF DESCRIPTION

Assembly system based on a ball anchoring device

The ball anchoring device consists of a lock body (10) comprising an annular wall (14) featuring radial holes (15) to accommodate radially mobile balls (16), and a locking piston (20) that slides axially within the body bore between a released position and a locked position.

The lock body (10) is inserted into a first hole (7) made in the surface of the first part (55) and into a second hole (8) made in the surface of the second part, the two holes being more or less coaxial. It features a flange (12) bearing against the first part around the first hole through a spring thrust element (18), and with the piston in the locked position, the balls (16) are maintained partly protruding under the free face (82) of the second part, on the one hand in angular contact with the edge (81) of the second hole (8), and on the other hand bearing against a lateral retention surface (23) of the piston head (22), under the effect of the axial thrust applied to the balls by the body through the load applied to the flange (12) by the spring thrust element (18).

Figure 5